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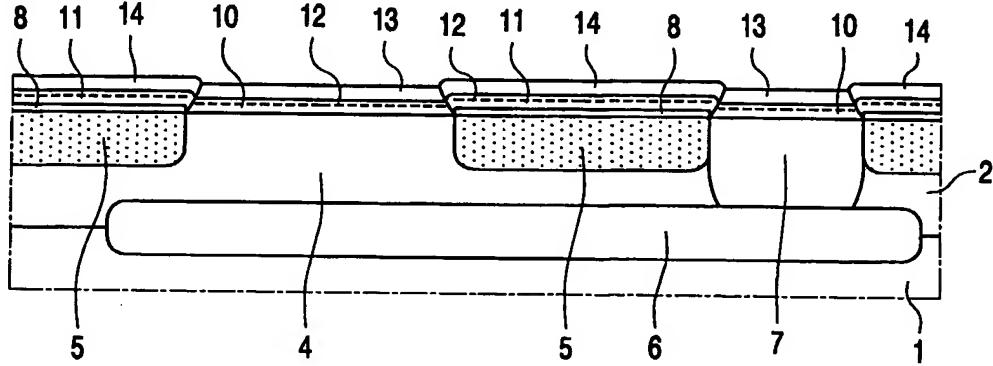
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(54) Title: METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE



(57) Abstract: Method of manufacturing a semiconductor device, in which on a region of silicon oxide (5) situated next to a region of monocrystalline silicon (4) at the surface (3) of a semiconductor body (1), a non-monocrystalline auxiliary layer (8) is formed. The auxiliary layer is formed in two steps. In the first step, the silicon body is heated in an atmosphere comprising a gaseous arsenic compound; in the second step it is heated in an atmosphere comprising a gaseous silicon compound instead of said arsenic compound. Thus, the regions of silicon oxide are provided with an amorphous or polycrystalline silicon seed layer in a self-aligned manner.

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# INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H01L21/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 110 757 A (ARST MARGARETH C ET AL) 5 May 1992 (1992-05-05) column 4, line 43 – column 5, line 4; figure 1 -----	1-7
A	US 5 491 107 A (TURNER CHARLES L ET AL) 13 February 1996 (1996-02-13) abstract -----	1-7
A	US 6 048 781 A (MANNING MONTE ET AL) 11 April 2000 (2000-04-11) claim 1 -----	1-7
A	US 5 310 698 A (WILD BARBARA) 10 May 1994 (1994-05-10) claim 1; figure 1 -----	1-7
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Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 942 286 A (GWO SHANGJR ET AL) 24 August 1999 (1999-08-24) claim 1 -----	1-7
A	US 6 344 673 B1 (BUCHET CORINNE ET AL) 5 February 2002 (2002-02-05) claims 1-7 -----	1-7

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